Claims

1. A complex comprising first and second peptides, the first peptide comprising the V3 loop of gp120, the V3 loop being available to coordinate with a binding region on the second peptide, the binding region comprising at least residues 21-40 and 46-60 of SEQ ID NO 1, or a fragment, mutant or variant thereof capable of binding residues 301-419 of SEQ ID NO. 2.

2. A complex comprising first and second peptides, the first peptide comprising the V3 loop of gp120, the V3 loop being available to coordinate with a binding region on the second peptide, the binding region comprising at least residues 21-40 and 46-60 of SEQ ID NO 1.

3. A complex comprising first and second peptides, the first peptide comprising the V3 loop of gp120, the V3 loop being available to coordinate with a binding region on the second peptide, the binding region being derived from Tat and being recognisable by the monoclonal antibody directed against the CCR5 second extracellular loop described by Lee, B., *et al.*, J. Biol. Chem., 1999, Vol. 274, 9617-9626.

4. A complex according to any preceding claim, wherein the Tat binding region comprises at least residues 21-60 of SEQ ID NO 1, or a fragment, mutant or variant thereof capable of binding residues 301-419 of SEQ ID NO. 2.

5. A complex according to any preceding claim, prepared with biologically active Tat.

6. A complex according to any preceding claim, wherein the peptide comprising the V3 loop comprises some or all of Env in addition to the V3 loop.

7. A complex according to any preceding claim, wherein the peptide comprising the V3 loop comprises the complete sequence of SEQ ID NO 2, or a fragment, variant or mutant thereof capable of binding a peptide consisting of residues 21-60 of SEQ ID NO 1.

8. A complex according to any preceding claim, wherein the peptide comprising the V3 loop consists essentially of the V3 loop region of gp120.

9. A complex according to any preceding claim, wherein the peptide comprising the V3 loop comprises at least residues 301-419 of SEQ ID NO. 2, or a fragment, variant or mutant thereof capable of binding a peptide consisting of residues 21-60 of SEQ ID NO 1.

10. A complex according to any preceding claim, having all or part of gp160 as a component thereof, the gp160 comprising at least the V3 loop of gp120 and lacking at least the majority of the V2 loop of gp120.

11. A complex according to any preceding claim, having ΔV2Env as a component thereof.

12. A complex according to any preceding claim, wherein the peptide comprising the V3 loop comprises at least residues 301 to 419 as shown in SEQ ID NO. 2.

13. A complex according to any preceding claim, further comprising a molecule or substance capable of interacting with Env to expose a functional V3 loop.

14. A complex according to claim 13, wherein said molecule or substance is CD4 or a fragment, mutant or variant thereof.

15. A complex according to any preceding claim, further comprising a heparan sulphate, optionally further comprising at least one other molecule capable of binding said heparan sulphate.

16. A complex according to any preceding claim, further comprising a substance selected from integrins, basic fibroblast growth factor, CD26, VEGF receptors, and chemokine receptors.

17. A complex according to any preceding claim, wherein the Tat binding region is contained within a fragment of Tat generatable by proteasomes of human cells on exposure to Tat.

18. A complex according to claim 17, wherein the Tat fragment is selected from: fragments containing the cysteine, basic and RGD regions of Tat; fragments containing the cysteine and basic regions of Tat; fragments containing the basic and RGD region of Tat; and, fragments containing the basic region of Tat, alone.

19. A complex according to any preceding claim, wherein said peptides are cross-linked.

20. Use of a complex according to any preceding claim to generate antibodies thereagainst.

21. Use according to claim 20 in a process to obtain a monoclonal cell line.

22. Use according to claim 21 or 22, wherein the antibodies are selected such as not to recognise any of one of the group consisting of native Tat, gp160, CD4 or gp120, CCR5, and the V3 loop region of gp120, when presented in isolation from any of the others of said group, but are capable of binding a complex according to any of claims 1 to 19.

23. An antibody obtained in accordance with any of claims 20 to 22.

24. The antibody of claim 23 which is humanised to prevent or reduce an adverse immune reaction on injection into a human.

25. Use of the antibody of claim 23 or 24 in prophylactic or therapeutic passive immunisation against a virus infection, wherein said virus expresses Tat.

26. Use according to claim 25, wherein said virus is HIV.

27. Use of claim 25 or 26, wherein the recipient is an expectant or nursing mother.

28. Use of a complex according to any of claims 1 to 19 as an immunogen for vaccination.

29. Use according to claim 28, wherein said virus is HIV.

30. A complex according to any of claims 1 to 19, provided as a combination of the peptides in a vehicle suitable for injection.

31. A kit comprising at least two separate preparations of the components of a complex according to any of claims 1 to 19.

32. Use of a complex according to any of claims 1 to 19 in therapy.

33. Use of a complex according to any of claims 1 to 19, in the preparation of a medicament for the treatment or prophylaxis of a viral infection, whereby the infecting virus expresses a molecule capable of forming a ternary complex between said molecule, CD4 and CCR5.

34. Use of a complex according to any of claims 1 to 19 to establish whether a sample from a patient contains antibodies against said complex.